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[11403/12]

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BOARD OF PATENT APPEALS AND INTERFERENCES**

In re Application of:

Mark Klausner et al.

For: AUTONOMOUS IN VEHICLE
NAVIGATION SYSTEM AND
DIAGNOSTIC SYSTEM

Filed: December 13, 2001

Serial No.: 10/017,093

X

: Examiner: Thu V. Nguyen

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: Art Unit: 3661

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REPLY BRIEF TRANSMITTAL

SIR:

Accompanying this Appeal Brief Transmittal is a Reply Brief pursuant to 37 C.F.R. §41.41. Appellant submits the present Reply Brief (the two-month response date for which is April 11, 2005 (since April 10, 2005 is a Sunday)) in response to the Examiner's Answer mailed on february 10, 2005 ("the Answer"). *Although not required, two duplicate copies of this Reply Brief are also being submitted herewith as a courtesy to the Patent Office.*

While no fees are believed to be due, the Commissioner is also authorized, as necessary and/or appropriate, to charge any appropriate fees (including any Rule 136(a) extension fees) or credit any overpayment to Deposit Account No. 11-0600. A duplicate copy of this transmittal is enclosed for this purpose.

Respectfully submitted,

Dated: 4/11/2005

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U.S. Pat. App. Ser. No. 10/017,093
Attorney Docket No. 11403/12
Reply Brief to Answer of 2/10/05

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Signature: AARON C. DEDITCH
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REPLY BRIEF PURSUANT TO 37 C.F.R. § 41.41

SIR:

Appellant submits the present Reply Brief (the two-month response date for which is April 11, 2005 (since April 10, 2005 is a Sunday)) in response to the Examiner's Answer mailed on February 10, 2005 ("the Answer"). *Although not required, two duplicate copies of this Reply Brief are also being submitted herewith as a courtesy to the Patent Office.*

For the reasons set forth in the Appeal Brief and those set forth below, it is again respectfully submitted that the final rejections of claims 20 to 256 and 29 to 39 should be reversed.

ISSUE 1

Claims 20 to 26 and 29 to 39 were rejected under 35 U.S.C. § 103(a) as unpatentable over Van Bosch, U.S. Patent No. 6,493,629 (the “Van Bosch” reference) in view of Hanson et al., U.S. Patent Application Publication. No. 2002/0156558 (the “Hanson” reference), and further in view of Lang et al., U.S. Patent No. 6,295,492 (the “Lang” reference).

Group 1 - Claims 20 to 26 and 29 to 39

It is respectfully submitted that the combination of the references does not render obvious the subject matter of claims 20 to 26 and 29 to 39.

It is noted that the “Hanson” reference is only prior art as to the present application if it is entitled to the earlier filing date of its provisional application, since the application was only perfected when it was filed on December 28, 2001 and published on October 24, 2002. The present application was filed on December 13, 2001, so that the “Hanson” reference is not prior art unless the “Hanson” claims are fully supported under the first paragraph of Section 112. It is not conceded that “Hanson” has been established to be prior art.

The Answer admits that “Van Bosch” does not “teach a sensor for transmitting error code that concerns diagnostic information”. The assertions made also ignore the language of claim 20.

Also in this regard and in particular, the Office Actions to date admit that the “Van Bosch” reference does not disclose a sensor for transmitting error code that concerns diagnostic information, nor a sensor that is coupled to the controller by a vehicle bus. (Office Action; page 2, ll. 2-4). The Office Action conclusorily asserts that these features are taught by the “Hanson” and “Lang” references. The combination of the references, even including the “Hanson” reference (which may not be prior art) does not render obvious the subject matter of claim 20.

Claim 20 is directed to a system for monitoring at least one apparatus in a vehicle including: at least one sensor situated in the vehicle for sensing at least one error code of the at least one apparatus, the at least one sensor being electrically coupled to a vehicle bus; a gateway node situated in the vehicle, *the gateway node being electrically coupled to the vehicle bus, the at least one sensor for communicating the at least one error code to the*

gateway node via the vehicle bus using a network protocol, the gateway node including a controller arrangement and a first wireless protocol arrangement, the first wireless protocol arrangement being coupled to the controller arrangement; and a processor, the gateway node communicating the at least one error code to the processor via a second wireless protocol arrangement that communicates with the first wireless protocol arrangement, using a wireless communication protocol, in which the at least one error code concerns diagnostics information and is accessible from the vehicle bus.

The Answer merely asserts that Lang teaches that sensors can send error codes. It is respectfully submitted that any review of the third-level “Lang” reference indicates that it does not disclose whether taken alone or combined (the properness of which is not conceded) a system as provided for in the context of claim 20 in which *the gateway node is electrically coupled to the vehicle bus, the at least one sensor for communicating the at least one error code to the gateway node via the vehicle bus using a network protocol, the gateway node including a controller arrangement and a first wireless protocol arrangement, the first wireless protocol arrangement being coupled to the controller arrangement, and a processor, where the gateway node communicates the at least one error code to the processor via a second wireless protocol arrangement that communicates with the first wireless protocol arrangement, using a wireless communication protocol, in which the at least one error code concerns diagnostics information and is accessible from the vehicle bus*, so as to provided the benefits of the presently claimed subject matter as provided for in the present application.

As explained in the present application, this system provides the benefit of providing for a remote diagnostics system that obtains information from the vehicle bus:

In another embodiment, the sensor data is used in a diagnostic procedure to evaluate the vehicle systems. Sensor 11 may therefore also be any type of sensor evaluating another vehicle system or, alternatively, any system with self-diagnosing capabilities (i.e. any system capable of evaluating its own status). . . .

The status of sensor 11 might be communicated to the vehicle bus 12, where the controller 13 could read the status off the bus and communicate it to Bluetooth hardware 14 (or any other appropriate short-range wireless transmitter). Bluetooth hardware 14 might transmit the status code to remote Bluetooth hardware set 16 (or another short-range wireless transmitter). Remote Bluetooth hardware set might communicate the status

code to processor 17, which might be a handheld computer running a diagnostic program. . . .

(Specification, pages 8 and 9).

The “Van Bosch” reference does not disclose or suggest, in the context of the claimed subject matter of claim 20, a gateway node to which the at least one sensor communicates at least one error code via the vehicle bus using a network protocol. The Office Action apparently relies on all three references, the “Van Bosch”, the “Hanson”, and the “Lang” references in asserting that the combination of the references renders the subject matter of this claim obvious. (Office Action; page 2, ll. 8-12). However, the Office Action identifies various discrete elements of claim 20 and suggests their combination without providing a motivation for the combination. Additionally, none of the references discloses a gateway node that is electrically coupled to a vehicle bus in which a sensor communicates an error code to the gateway node via the vehicle bus. It is therefore respectfully requested that the obviousness rejection of claim 20 be withdrawn, since claim 20 is allowable, as are its dependent claims 21 to 26 and 29 to 32.

Claim 33 includes features like those of claim 20 and is therefore allowable for essentially the same reasons as claim 20. Claims 34 to 39 depend from claim 33, and are therefore allowable for the same reasons as claim 33.

In summary, it is respectfully submitted that claims 20 to 26 and 29 to 39 are allowable.

As regards the Examiner’s assertions that the case law may be essentially ignored, it is respectfully submitted that the case law must always be considered and complied with to properly reject any claim under the U.S. Patent Laws.

Thus, as further regards all of the obviousness rejections discussed herein, in rejecting a claim under 35 U.S.C. § 103(a), the *Office* bears the initial burden of presenting a prima facie case of obviousness. In re Rijckaert, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993). To establish prima facie obviousness, three criteria must be satisfied. First, there must be some suggestion or motivation to modify or combine reference teachings. In re Fine, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988). This teaching or suggestion to make the claimed combination must be found in the prior art and not based on the application disclosure. In re Vaeck, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991). Second, there

must be a reasonable expectation of success. In re Merck & Co., Inc., 800 F.2d 1091, 231 U.S.P.Q. 375 (Fed. Cir. 1986). Third, the prior art reference(s) must teach or suggest all of the claim features. In re Royka, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974). Thus, to reject a claim as obvious under 35 U.S.C. § 103, the prior art must disclose or suggest each claim element and it must also suggest combining the features in the manner contemplated by the claim. (See Northern Telecom, Inc. v. Datapoint Corp., 908 F.2d 931, 934 (Fed. Cir. 1990), cert. denied, 111 S. Ct. 296 (1990); In re Bond, 910 F.2d 831, 834 (Fed. Cir. 1990)).

Moreover, the “problem confronted by the inventor must be considered in determining whether it would have been obvious to combine the references in order to solve the problem.” (See Diversitech Corp. v. Century Steps, Inc., 850 F.2d 675, 679 (Fed. Cir. 1998)). It is respectfully submitted that, as discussed above, the references relied on, whether taken alone or combined, do not suggest in any way modifying or combining the references so as to provide the presently claimed subject matter for addressing the problems and/or providing the benefits discussed herein and in the specification, as explained above.

The cases of In re Fine, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988), and In re Jones, 21 U.S.P.Q.2d 1941 (Fed. Cir. 1992), also make plain that the Final Office Action's assertions that it would have been obvious to modify the reference relied upon does not properly support a § 103 rejection. It is respectfully suggested that those cases make plain that the Final Office Action reflects a subjective “obvious to try” standard, and therefore does not reflect the proper evidence to support an obviousness rejection based on the references relied upon. In particular, the Court in the case of In re Fine stated that:

Instead, the Examiner relies on hindsight in reaching his obviousness determination. . . .
One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention.

In re Fine, 5 U.S.P.Q.2d at 1600 (citations omitted; emphasis added). Likewise, the Court in the case of In re Jones stated that:

Before the PTO may combine the disclosures of two or more prior art references in order to establish *prima facie* obviousness, there must be some suggestion for doing so, found either in the references themselves or in the knowledge

generally available to one of ordinary skill in the art. . . .

Conspicuously missing from this record is any evidence, other than the PTO's speculation (if it be called evidence) that one of ordinary skill . . . would have been motivated to make the modifications . . . necessary to arrive at the claimed [invention].

In re Jones, 21 U.S.P.Q.2d at 1943 & 1944 (citations omitted; italics in original).

That is exactly the case here since it is believed and respectfully submitted that the Office Action reflects hindsight, reconstruction and speculation, which these cases have indicated does not constitute evidence that will support a proper obviousness finding.

More recently, the Federal Circuit in the case of In re Kotzab has made plain that even if a claim concerns a “technologically simple concept” — which is not even the case here, there still must be some finding as to the “specific understanding or principle within the knowledge of a skilled artisan” that would motivate a person having no knowledge of the claimed subject matter to “make the combination in the manner claimed”, stating that:

In this case, the Examiner and the Board fell into the hindsight trap. The idea of a single sensor controlling multiple valves, as opposed to multiple sensors controlling multiple valves, is a technologically simple concept. *With this simple concept in mind, the Patent and Trademark Office found prior art statements that in the abstract appeared to suggest the claimed limitation. But, there was no finding as to the specific understanding or principle within the knowledge of a skilled artisan that would have motivated one with no knowledge of Kotzab's invention to make the combination in the manner claimed.* In light of our holding of the absence of a motivation to combine the teachings in Evans, we conclude that the Board did not make out a proper *prima facie* case of obviousness in rejecting [the] claims . . . under 35 U.S.C. Section 103(a) over Evans.

(See In re Kotzab, 55 U.S.P.Q.2d 1313, 1318 (Federal Circuit 2000) (italics added)). Here again, it is believed that there have been no such findings to establish that the features

discussed above of the rejected claims are met by the reference relied upon. As referred to above, any review of the reference relied upon makes plain that it simply does not describe the features discussed above of the claims as now presented.

More recent still, in the case of *In re Lee*, 61 U.S.P.Q.2d 1430, 1433-35 (Fed. Cir. 2002), the Court reversed the Board of Appeals for relying on conclusory statements, stating the following:

*With respect to Lee's application, neither the examiner nor the Board adequately supported the selection and combination of the Nortrup and Thunderchopper references to render obvious that which Lee described. The examiner's conclusory statements that "the demonstration mode is just a programmable feature which can be used in many different device[s] for providing automatic introduction by adding the proper programming software" and that "another motivation would be that the automatic demonstration mode is user friendly and it functions as a tutorial" do not adequately address the issue of motivation to combine. **This factual question of motivation is material to patentability, and could not be resolved on subjective belief and unknown authority.** It is improper, in determining whether a person of ordinary skill would have been led to this combination of references, simply to "[use] that which the inventor taught against its teacher." Thus the Board must not only assure that the requisite findings are made, based on evidence of record, but must also explain the reasoning by which the findings are deemed to support the agency's conclusion.*

....

*In its decision on Lee's patent application, the Board rejected the need for "any specific hint or suggestion in a particular reference" to support the combination of the Nortrup and Thunderchopper references. **Omission of a relevant factor required by precedent is both legal error and arbitrary agency action.***

[The] “common knowledge and common sense” on which the Board relied in rejecting Lee’s application are not the specialized knowledge and expertise contemplated by the Administrative Procedure Act. Conclusory statements such as those here provided do not fulfill the agency’s obligation. [The] Board’s findings must extend to all material facts and must be documented on the record, lest the “haze of so-called expertise” acquire insulation from accountability. “Common knowledge and common sense,” even if assumed to derive from the agency’s expertise, do not substitute for authority when the law requires authority.

Thus, the proper evidence of obviousness must show why there is a suggestion as to the reference so as to provide the subject matter of the claims and its benefits.

Accordingly, and in view of the foregoing, it is respectfully submitted that the Office Action’s unsupported assertion that it would have been obvious to replace the sensors 120 (fig. 2) of “Hanson” with the sensors of “Lang” and to connect the sensor to the system bus of Bosch to provide diagnostic information of the vehicle subsystems to the wireless device 130 (fig. 2) does not provide sufficient motivation to support the combination. The only motivation to combine the references comes from the disclosure of the present application, which constitutes improper hindsight reasoning. Since there is no motivation or suggestion to combine the references, the references do not render the subject matter of the claims obvious, as explained herein.

In short, there is no evidence that the reference relied upon, whether taken alone or otherwise, would provide the features of the claims discussed above. It is therefore respectfully submitted that the claims are allowable for these reasons.

As further regards all of the obviousness rejections of the claims, it is respectfully submitted that not even a *prima facie* case has been made in the present case for obviousness, since the Office Actions to date never made any findings, such as, for example, regarding in any way whatsoever what a person having ordinary skill in the art would have been at the time the claimed subject matter of the present application was made. (*See In re Rouffet*, 47 U.S.P.Q.2d 1453, 1455 (Fed. Cir. 1998) (the “factual predicates underlying” a *prima facie* “obviousness determination include the scope and content of the prior art, the differences

between the prior art and the claimed invention, and the level of ordinary skill in the art”)). It is respectfully submitted that the proper test for showing obviousness is what the “combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art”, and that the Patent Office must provide particular findings in this regard — the evidence for which does not include “broad conclusory statements standing alone”. (See In re Kotzab, 55 U.S.P.Q. 2d 1313, 1317 (Fed. Cir. 2000) (citing In re Dembiczak, 50 U.S.P.Q.2d 1614, 1618 (Fed. Cir. 1999) (obviousness rejections reversed where no findings were made “concerning the identification of the relevant art”, the “level of ordinary skill in the art” or “the nature of the problem to be solved”))). It is respectfully submitted that there has been no such showings by the Office Actions to date or by the Advisory Action.

In fact, the present lack of any of the required factual findings forces both Appellants and this Board to resort to unwarranted speculation to ascertain exactly what facts underly the present obviousness rejections. The law mandates that the allocation of the proof burdens requires that the Patent Office provide the factual basis for rejecting a patent application under 35 U.S.C. § 103. (See In re Piasecki, 745 F.2d 1468, 1472, 223 U.S.P.Q. 785, 788 (Fed. Cir. 1984) (citing In re Warner, 379 F.2d 1011, 1016, 154 U.S.P.Q. 173, 177 (C.C.P.A. 1967))). In short, the Examiner bears the initial burden of presenting a proper prima facie unpatentability case — which has not been met in the present case. (See In re Oetiker, 977 F.2d 1443, 1445, 24, U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992)).

In short, all of claims 20 to 26 and 29 to 39 are allowable.

U.S. Pat. App. Ser. No. 10/017,093
Attorney Docket No. 11403/12
Reply Brief to Answer of 2/10/05

CONCLUSION

In view of the above, it is respectfully requested that the rejections of claims 20 to 26 and 29 to 39 be reversed, and that ~~these claims~~ be allowed as presented.

Dated: 4/11/2005

Respectfully submitted,

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